

SYSTEMS FOR MONITORING AND CONTROLLING OPERATING MODES IN  
AN ETHERNET TRANSCEIVER AND METHODS OF OPERATING THE SAME

ABSTRACT OF THE DISCLOSURE

Disclosed are systems and methods for monitoring and  
5 controlling operating modes in a network transceiver. In one  
embodiment, a computer system is associable with an Ethernet  
network, and comprises a processing unit, a memory and a  
transceiver. The transceiver comprises an encoder, a decoder and  
a controller. The controller controls operating modes of the  
transceiver, and, specifically, (i) negotiates a communications  
channel between the computer system and another computer system  
over the Ethernet network wherein the computer system enters one of  
a master state and a slave state, and (ii) repeatedly directs, in  
response to entering the master state or slave state, the  
encoder to encode data to be transmitted to the another computer in  
one of an industry-compliant mode and a custom mode until the  
encoded data is properly received by the other computer.

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